

## Activity Sheets

The activity sheets provided on blackline masters are intended for use with the Off-Line Activities that accompany each guide. The activities function as reminders and reinforcement of key concepts and skills essential for success with the program.

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# Keyboard Commands

Write the name of the correct key beside each sentence.

1. It moves the cursor UP. \_\_\_\_\_
2. It moves the cursor LEFT. \_\_\_\_\_
3. It moves the cursor RIGHT. \_\_\_\_\_
4. It moves the cursor DOWN. \_\_\_\_\_
5. It picks up and drops objects. \_\_\_\_\_

Fill in the blanks to complete the sentences below.

6. To go from room to room, the cursor must go through \_\_\_\_\_.
7. You cannot move the cursor through a \_\_\_\_\_ between rooms.
8. To leave the program, press \_\_\_\_\_.
9. To turn the sound on and off, press CONTROL and \_\_\_\_\_.
10. To see a HELP screen for directions, press \_\_\_\_\_.

When you go to the computer or after you have been at the computer, write a list of the things you learned.

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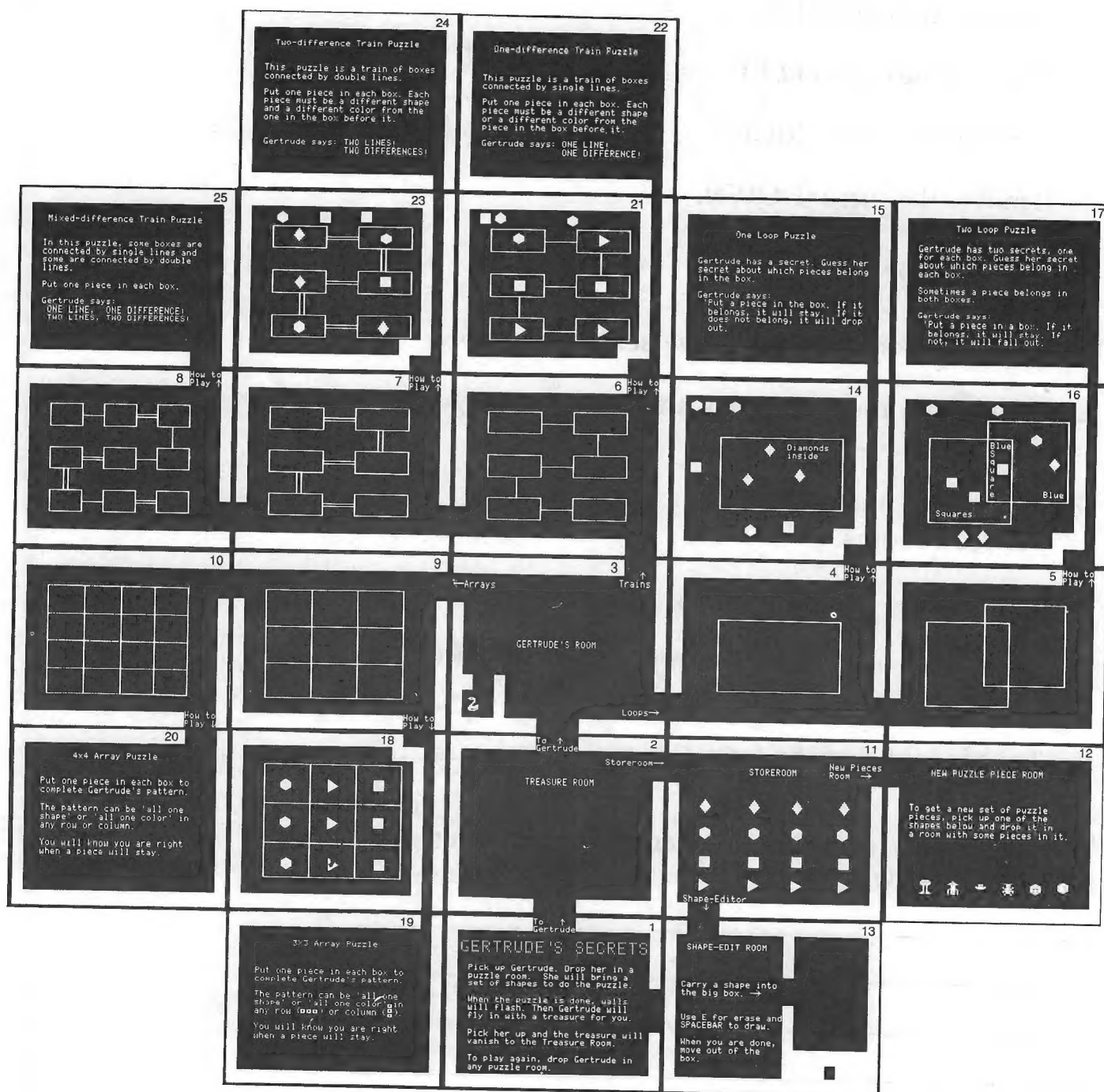
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# Map

The arrow points to the room by which you enter Gertrude's world.



# Quiz

Use the Map of Gertrude's World to answer the questions below.

1. In which room is Gertrude resting in her nest? \_\_\_\_\_
2. From Room 1, circle the direction you need to go to find Gertrude.  
RIGHT      LEFT      UP      DOWN
3. How many doors does Gertrude's Room have? \_\_\_\_\_
4. How many Loop puzzles are there? \_\_\_\_\_
5. How many Train puzzles are there? \_\_\_\_\_
6. How many Array puzzles are there? \_\_\_\_\_
7. How many puzzle rooms are there all together? \_\_\_\_\_
8. How many playing pieces are in the Storeroom? \_\_\_\_\_
9. From the One-Loop Puzzle room (Room 4), circle the direction you need to go to find out how to play.  
RIGHT      LEFT      UP      DOWN
10. Can you move inside Room 14? \_\_\_\_\_
11. How many doors does the New Puzzle Piece Room have?  
\_\_\_\_\_
12. From the 9-Box Train Puzzle (Room 8), circle the direction you need to go to find Gertrude in her nest.  
LEFT and UP      RIGHT and UP  
LEFT and DOWN      RIGHT and DOWN

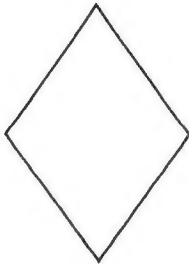
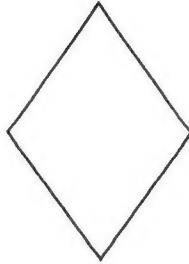
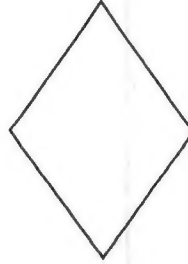
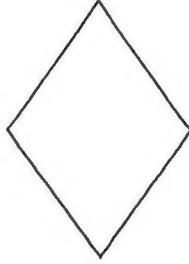
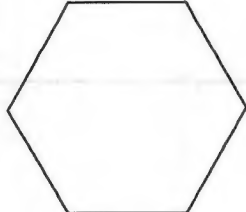
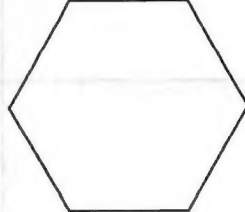
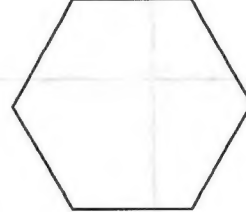
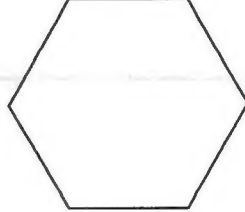
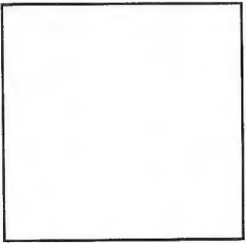
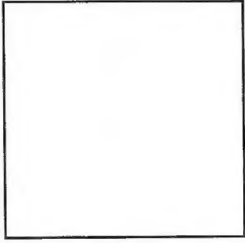
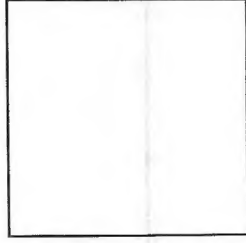

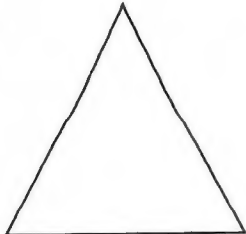
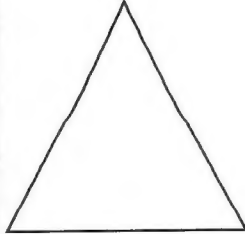
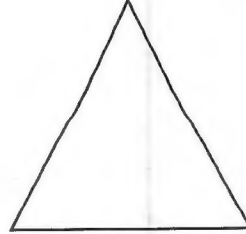
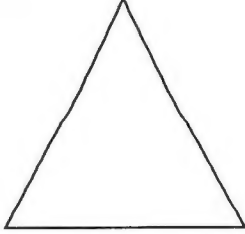
# Complete the Table

Answer the questions below about the number and kind of playing pieces Gertrude brings into each puzzle room.

Gertrude's Puzzle Pieces	How many pieces are there?	How many different colors are there?	What are the colors?	How many different shapes are there?	What are the shapes?
One-Loop Puzzle (Room 4)					
Two-Loop Puzzle (Room 5)					
One-Difference Train Puzzle (Room 6)					
Two-Difference Train Puzzle (Room 7)					
Mixed-Difference Train Puzzle (Room 8)					
3 × 3 Array Puzzle (Room 9)					
4 × 4 Array Puzzle (Room 10)					

# Attribute Cards

Color each shape. Cut out the cards.

	Orange	Green	Blue	Purple
Diamond				
Hexagon				
Square				
Triangle				

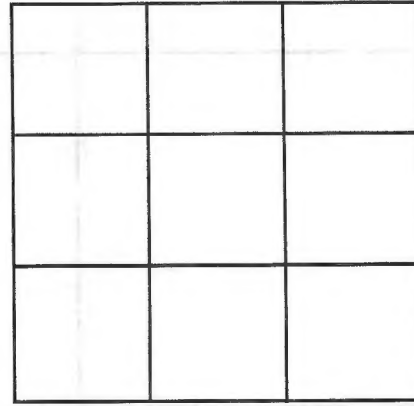
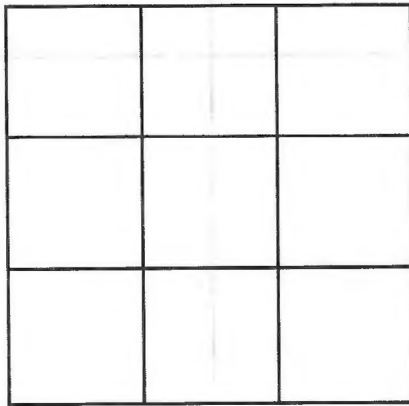
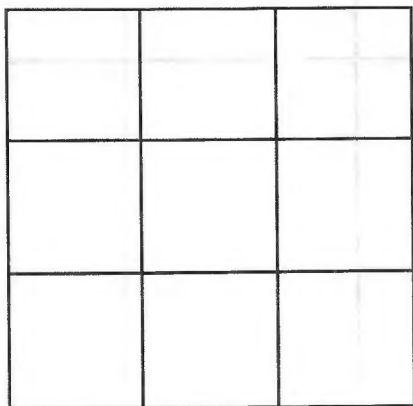
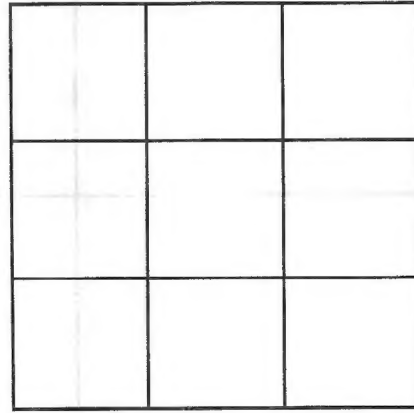
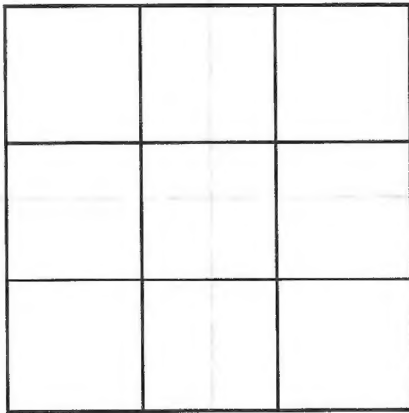
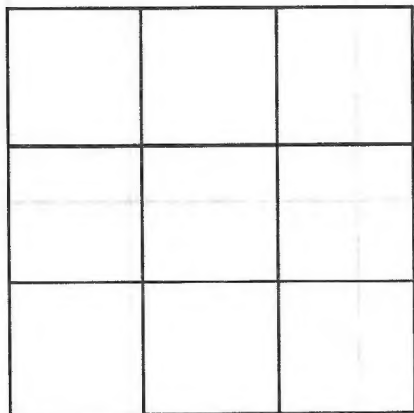
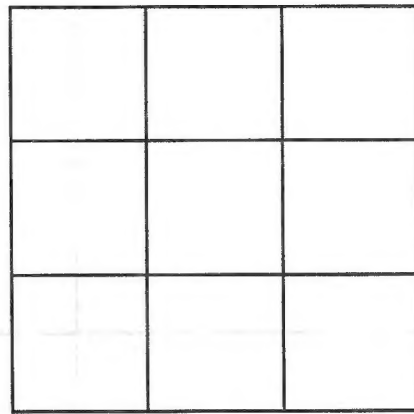
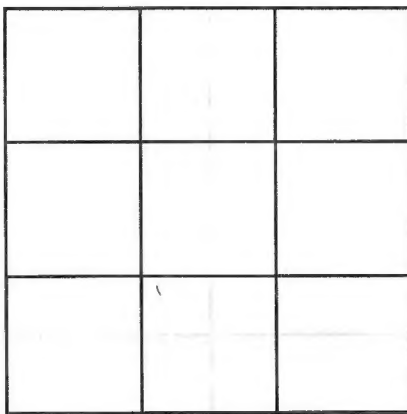
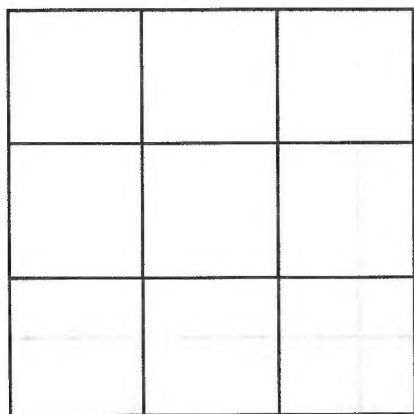
# Game Board

Use this game board to solve  $3 \times 3$  array puzzles.




# Game Boards

Record the solutions on the arrays below by drawing and coloring the shapes.

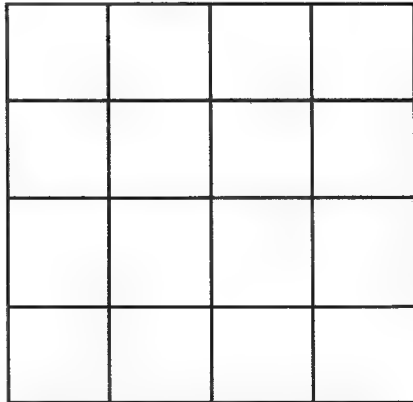
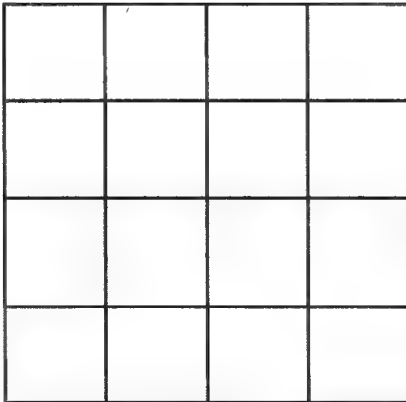
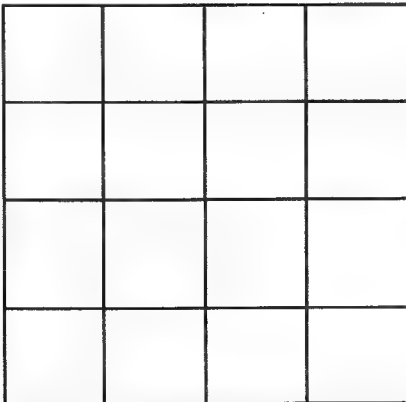
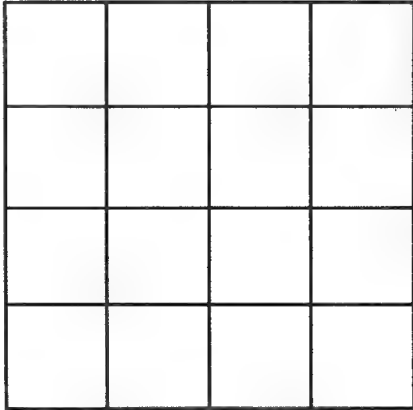
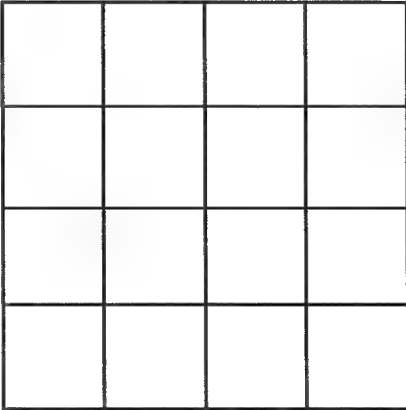
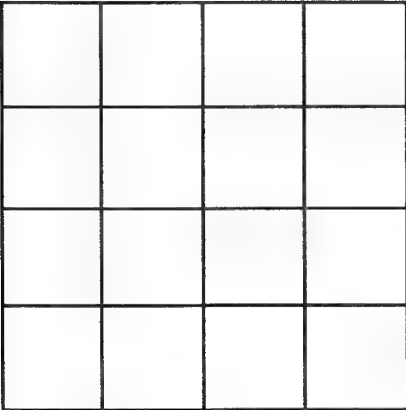
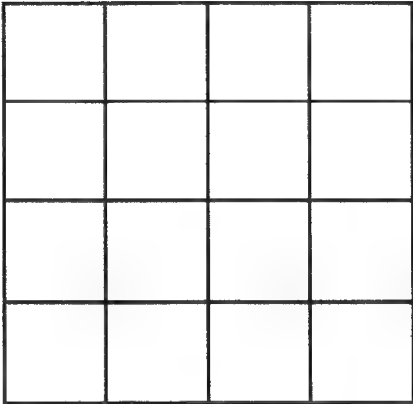
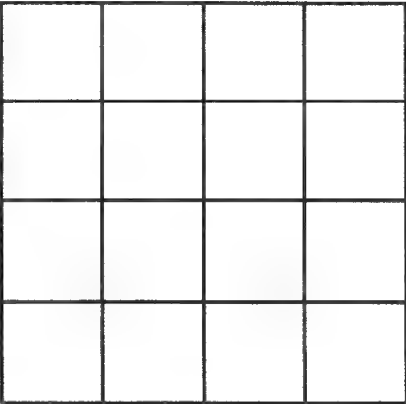
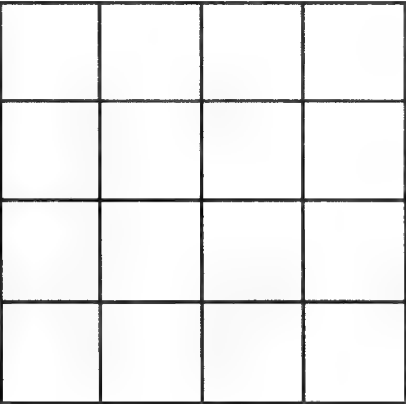


# Game Board

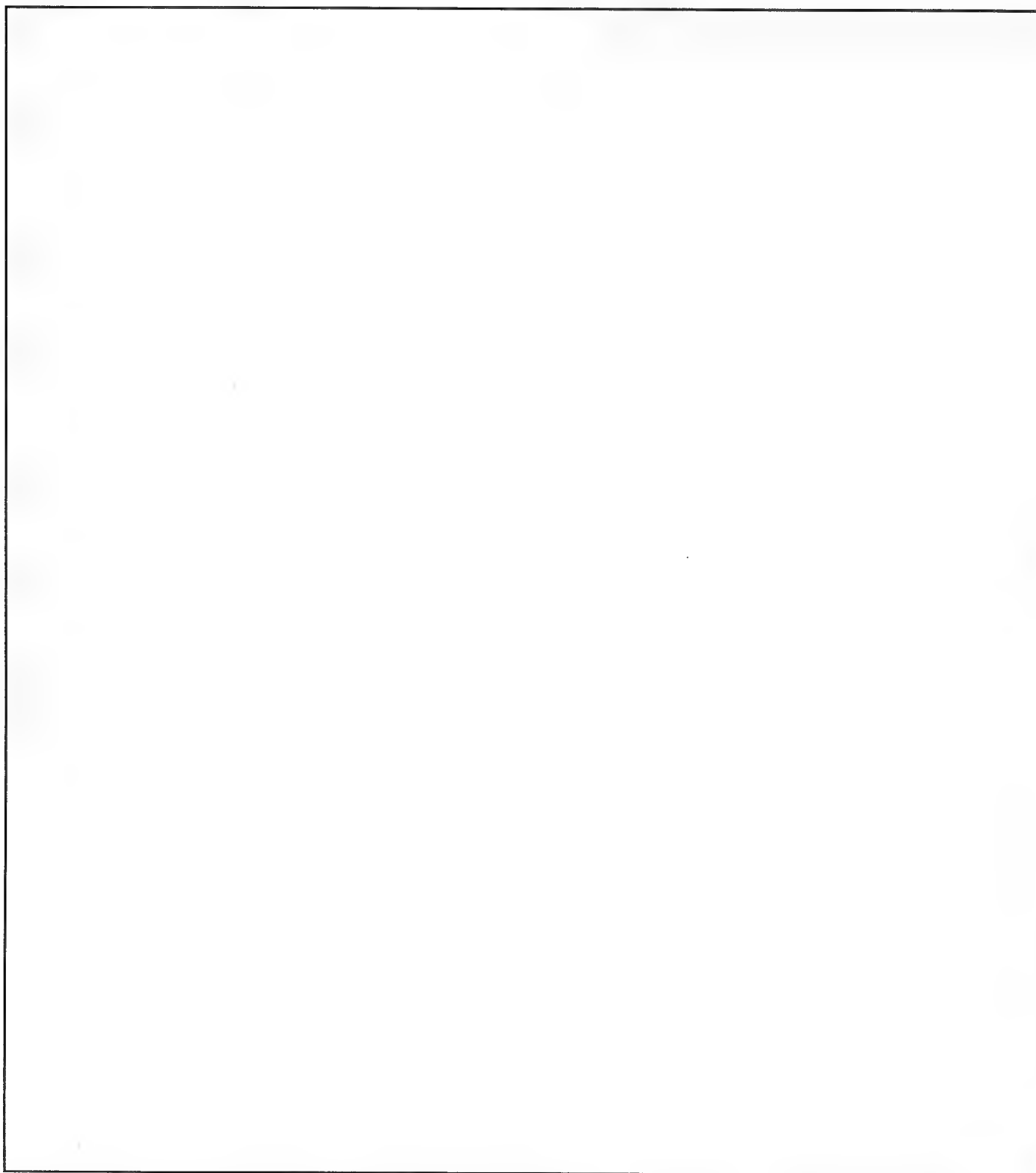
Use this game board to solve 4 × 4 array puzzles.


# Game Boards

Record the solutions on the arrays below by drawing and coloring the shapes.



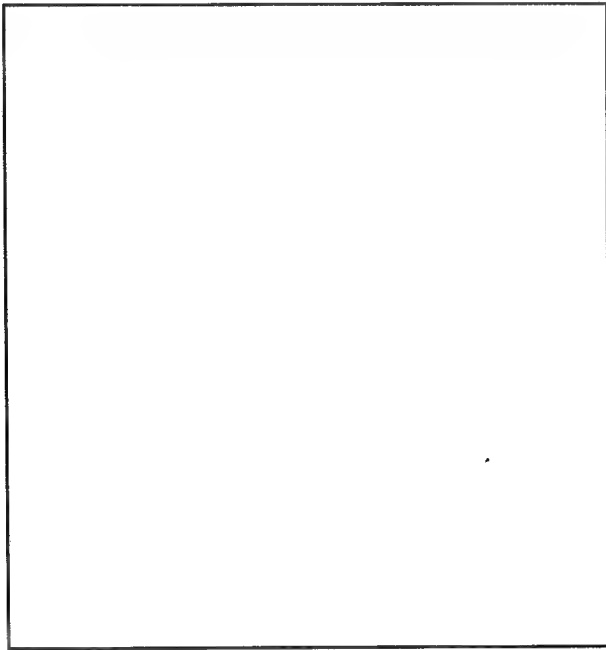
# Game Board



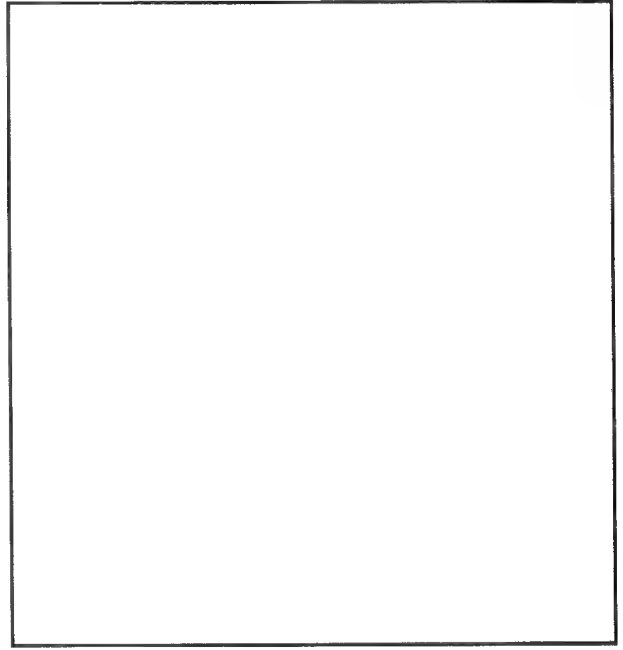
# Secret Solutions

Make up a rule for solving a one-loop puzzle for each box. Draw the different shapes and colors in the box where they belong.

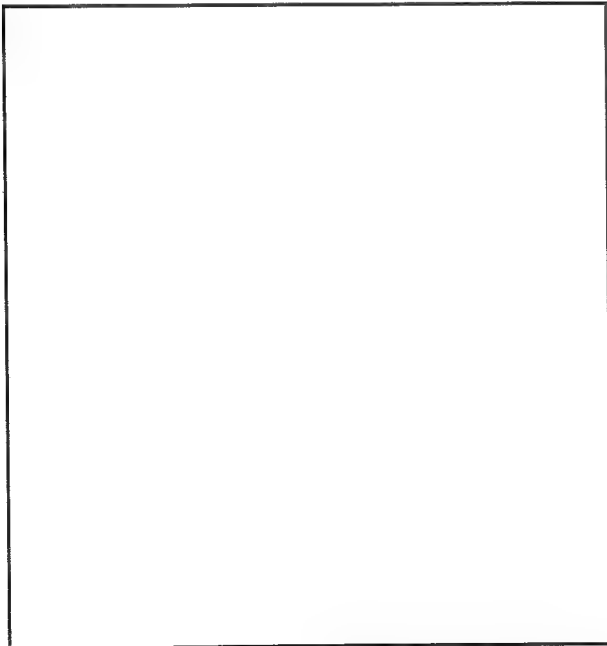
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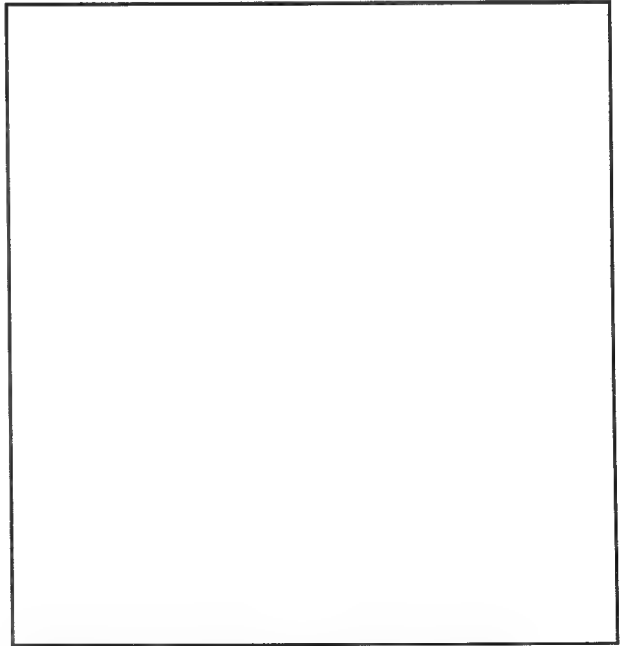
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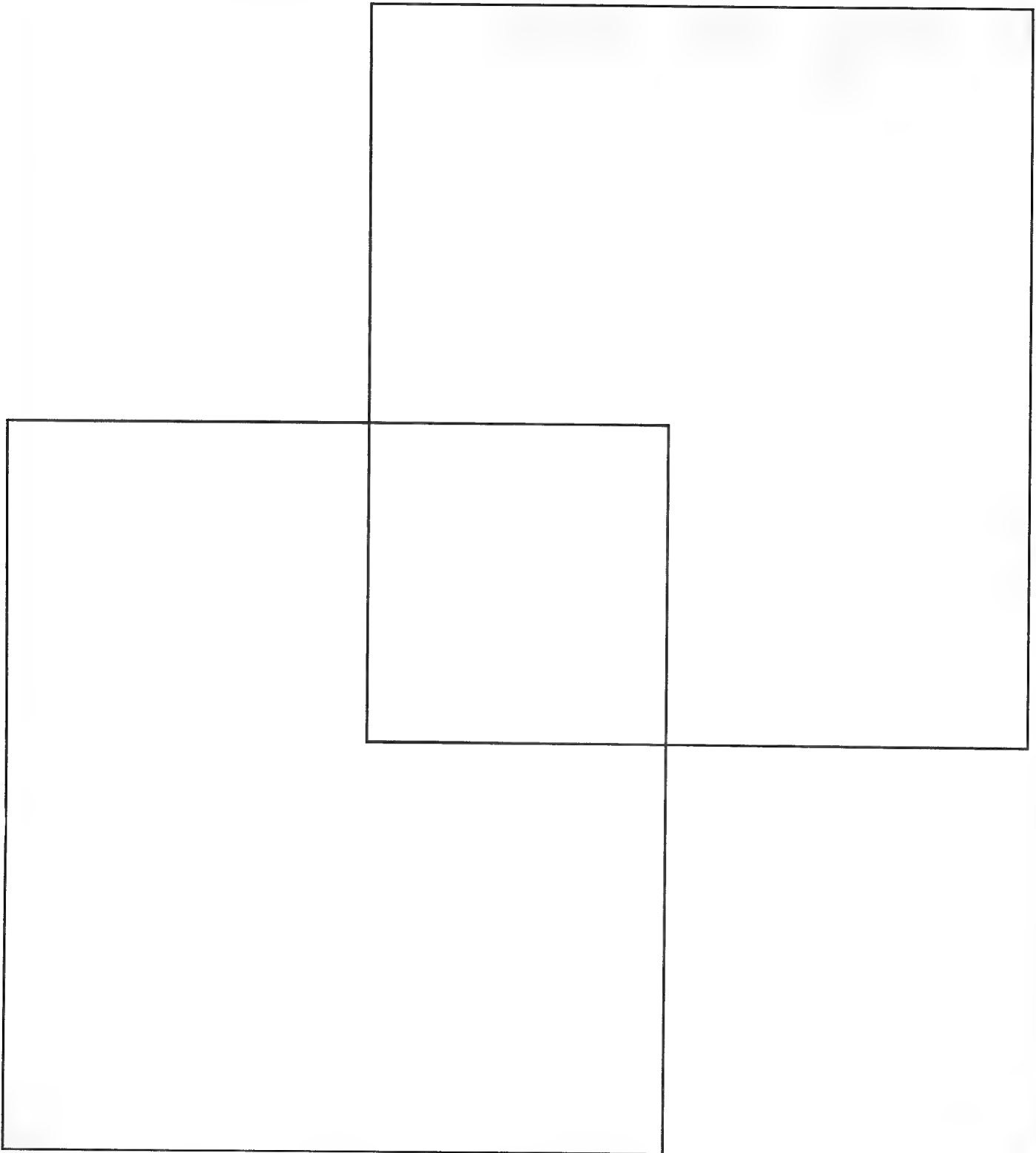
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4.



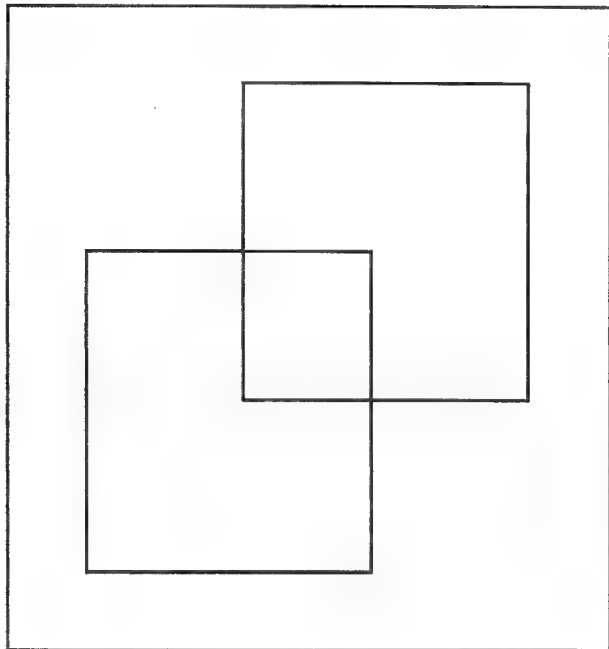
# Game Board



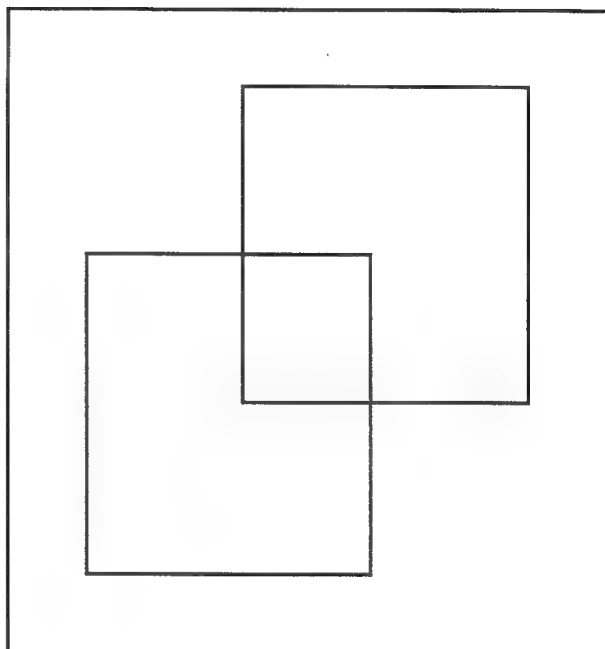
# Secret Solutions

Make up rules for solving a two-loop puzzle for each box. Draw and color the different shapes in the boxes where they belong.

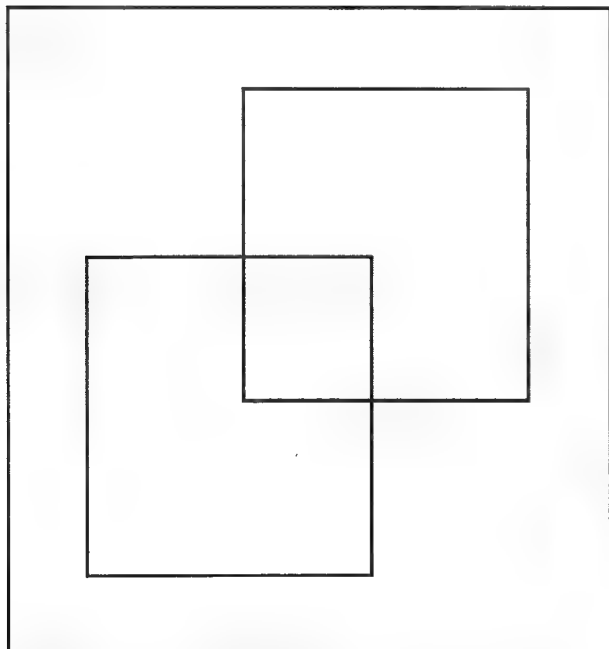
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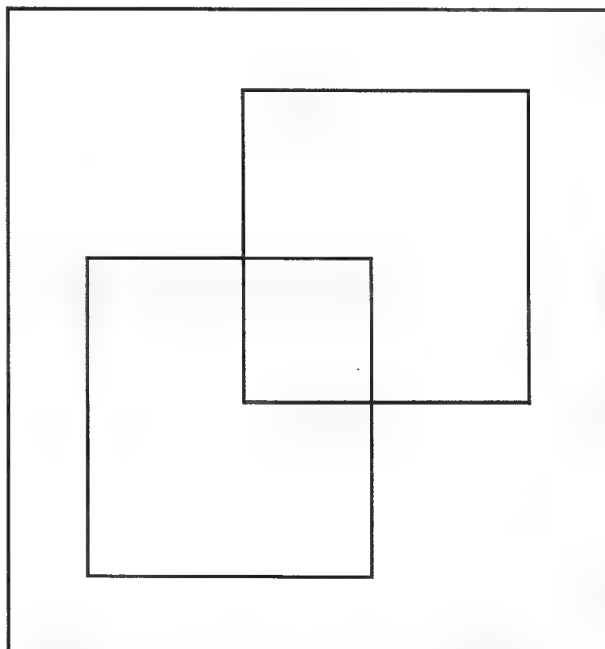
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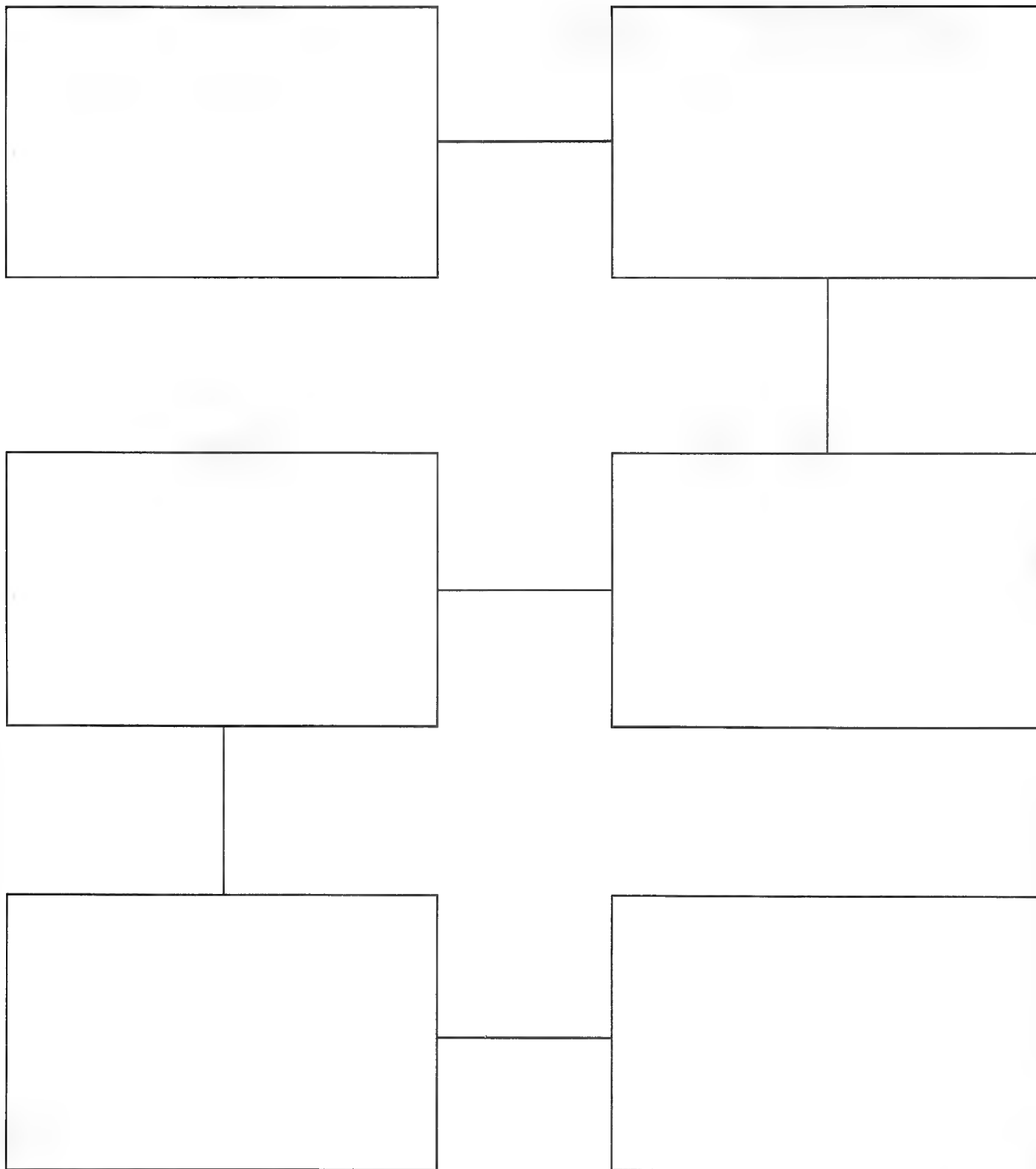
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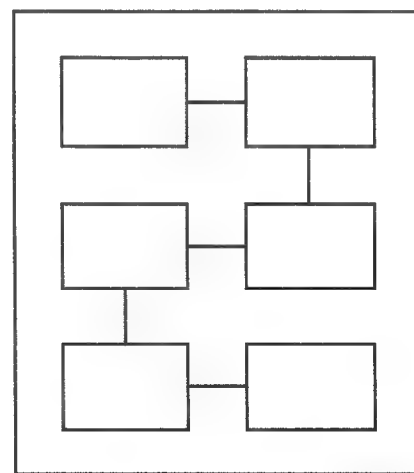
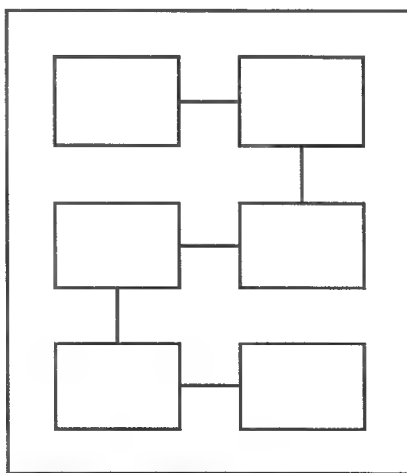
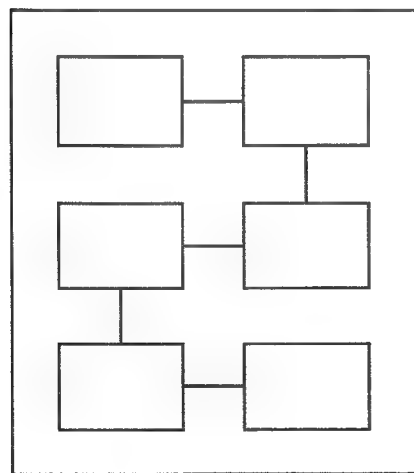
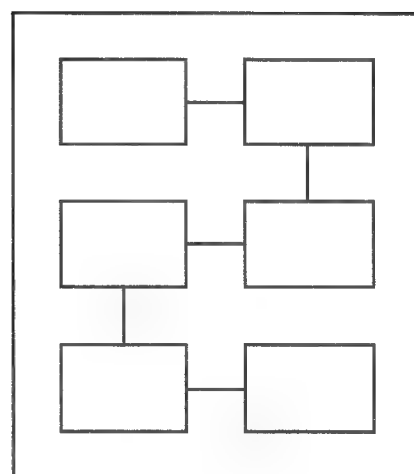
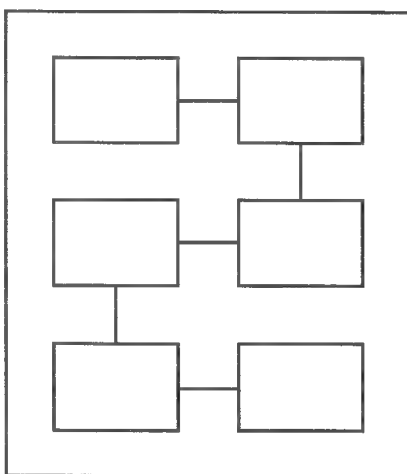
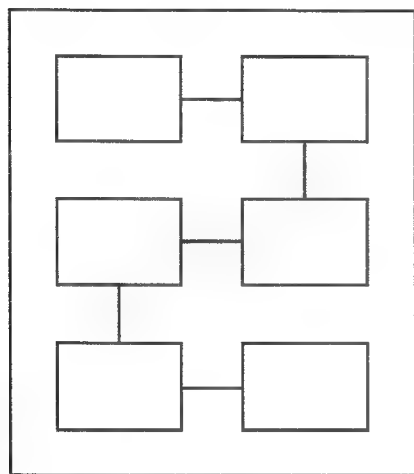
# Game Board



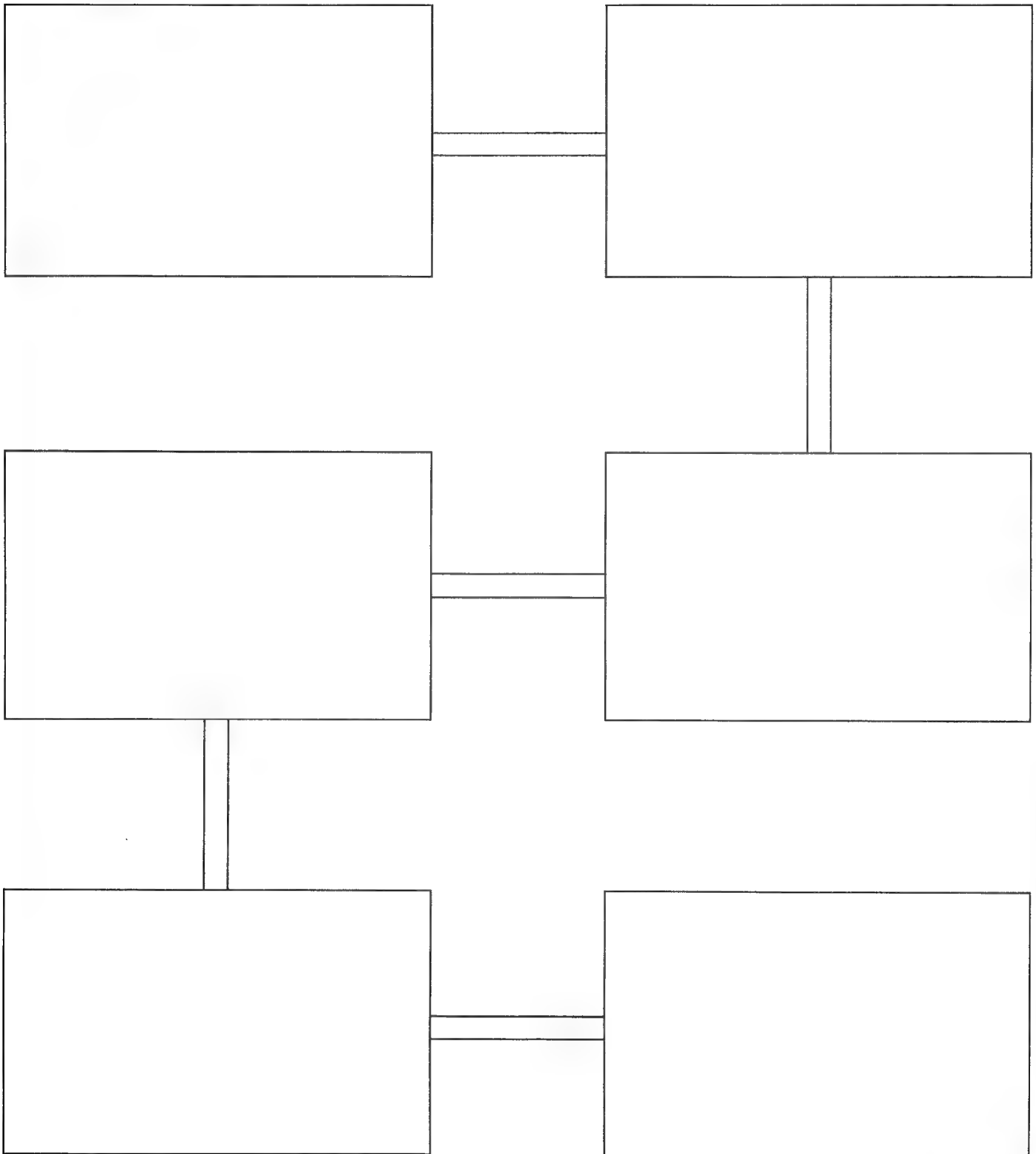


# Game Boards

You can find many different solutions to one puzzle. Record the solutions by drawing and coloring in the shapes.

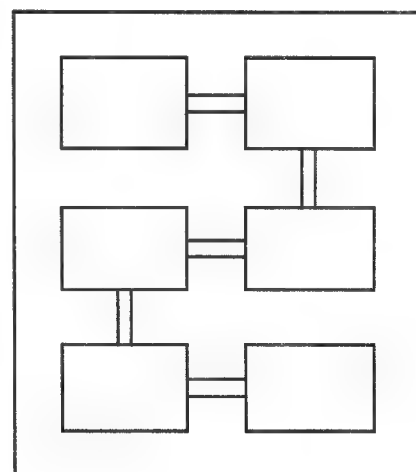
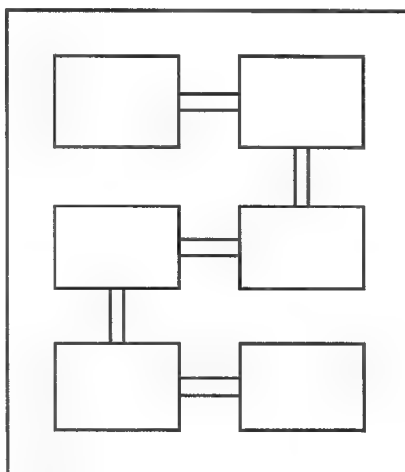
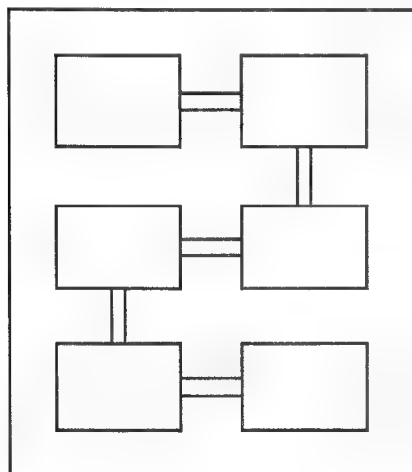
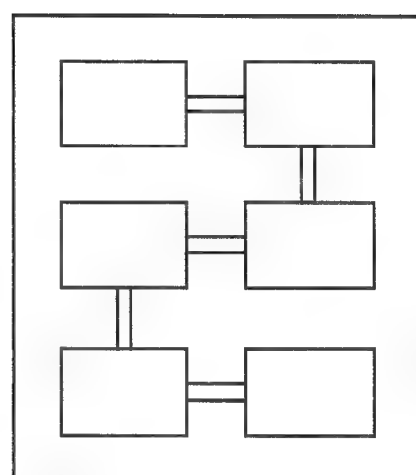
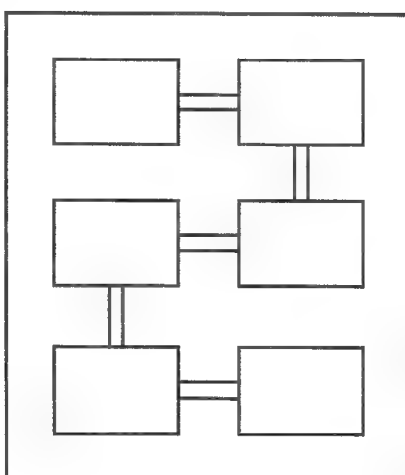
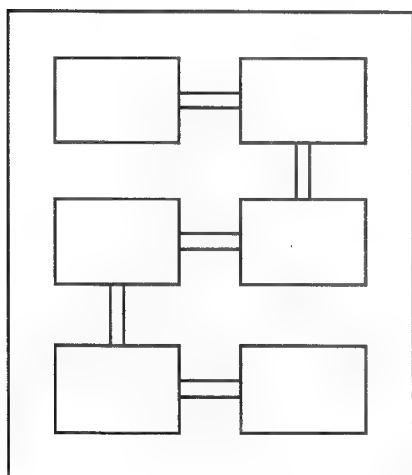


# Game Board

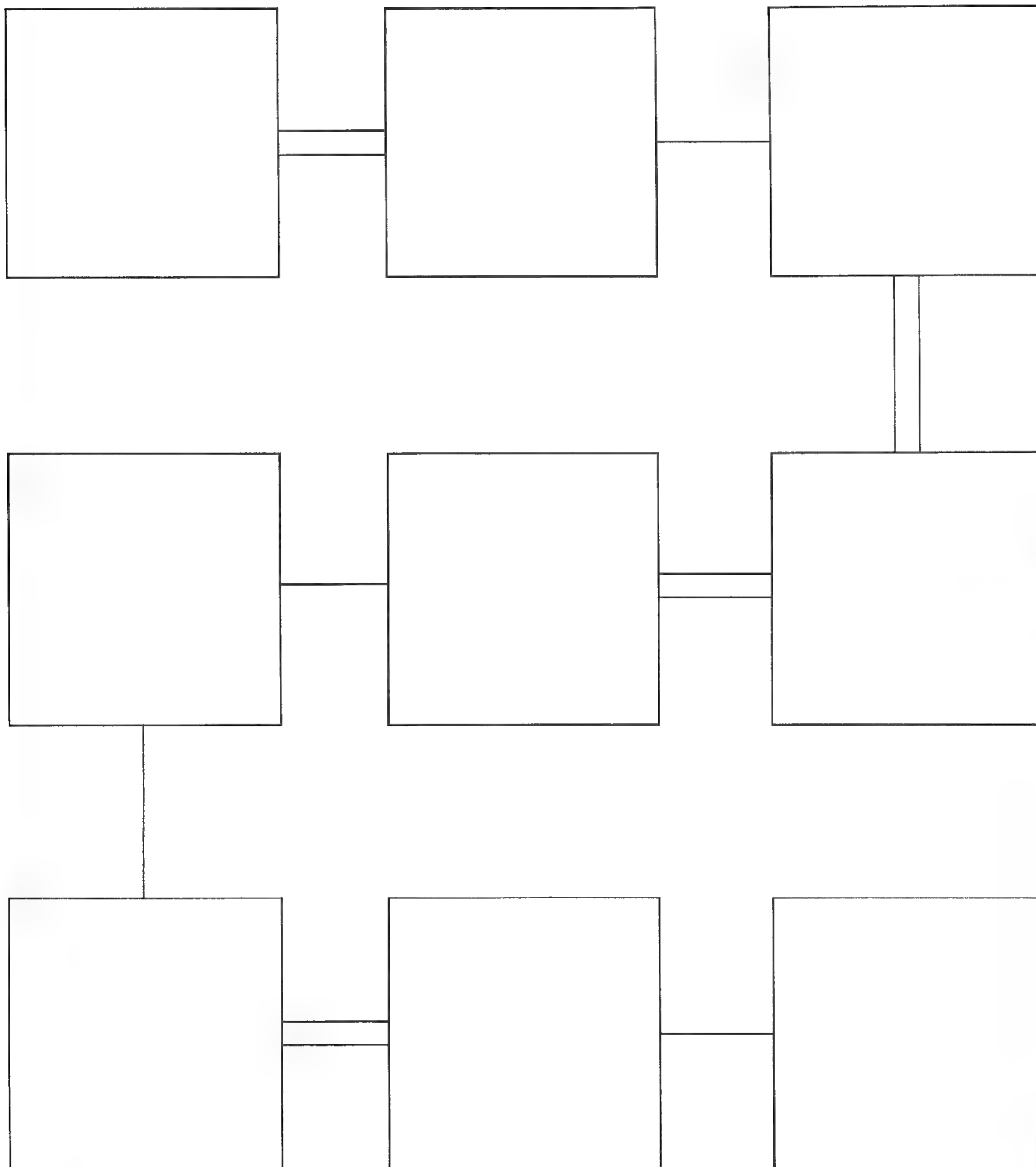


# Game Boards

You can find many different solutions to one puzzle. Record the solutions by drawing and coloring in the shapes.

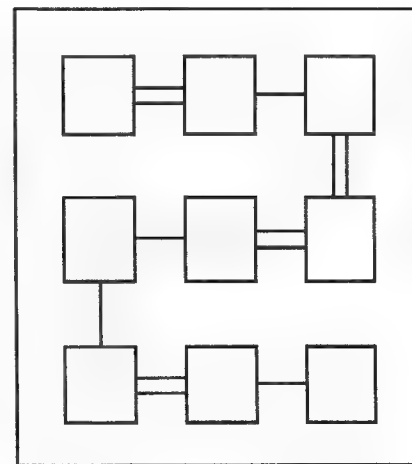
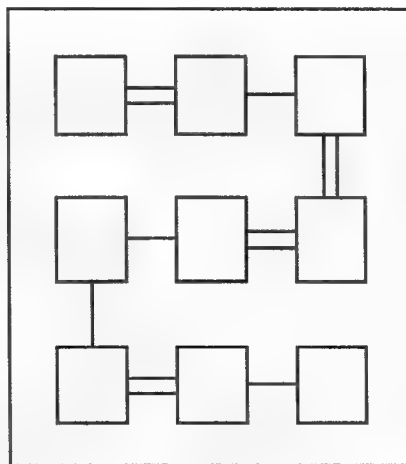
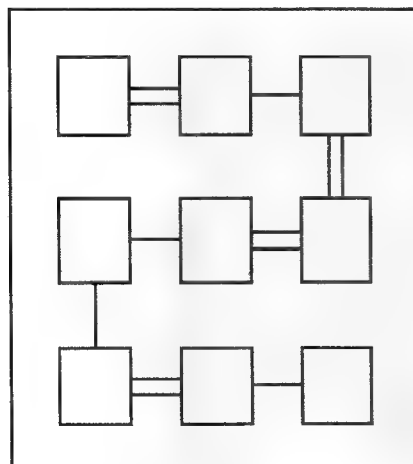
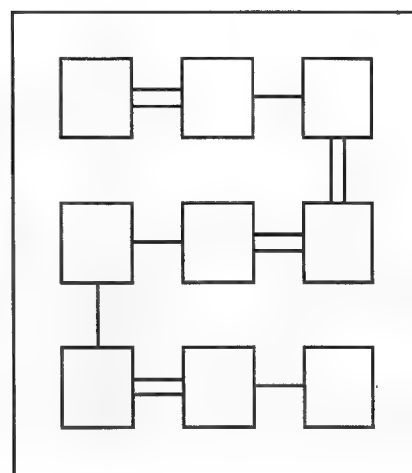
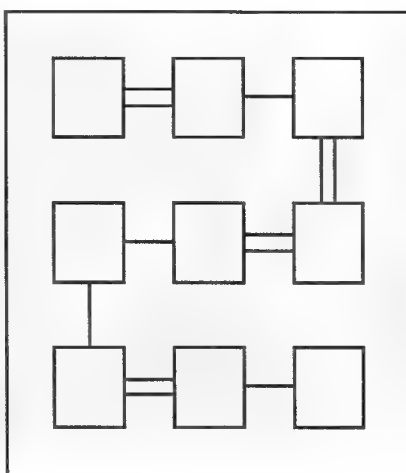
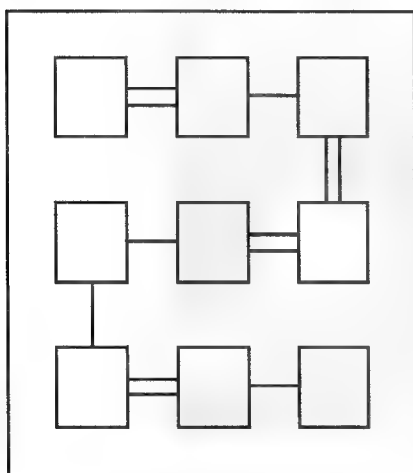


# Game Board

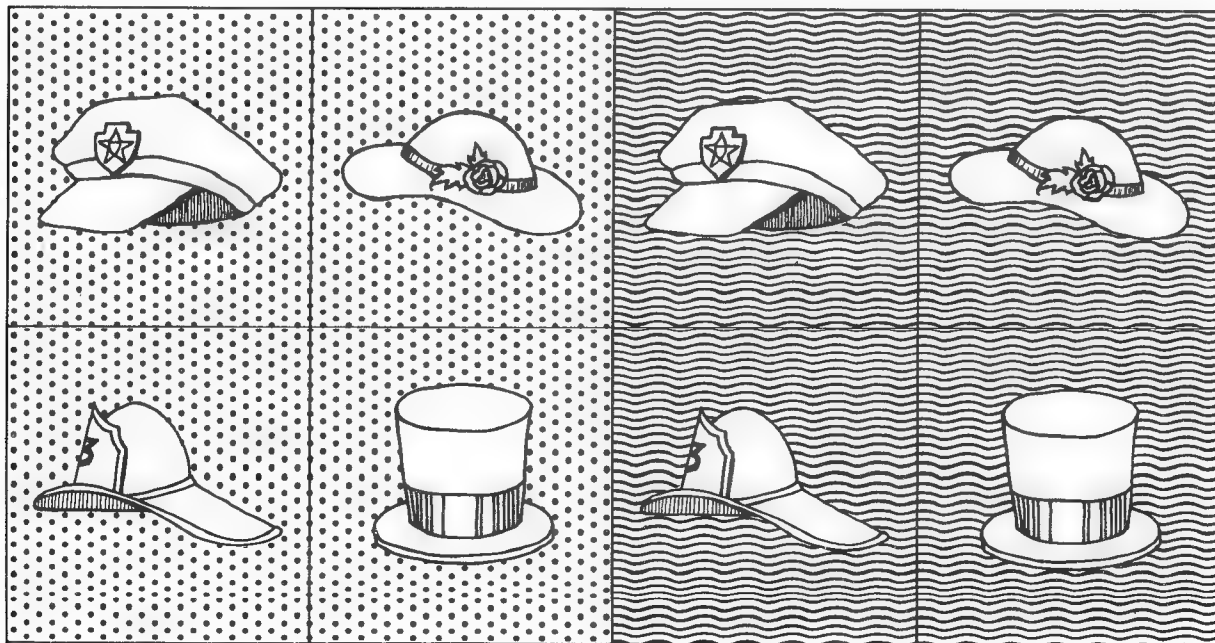
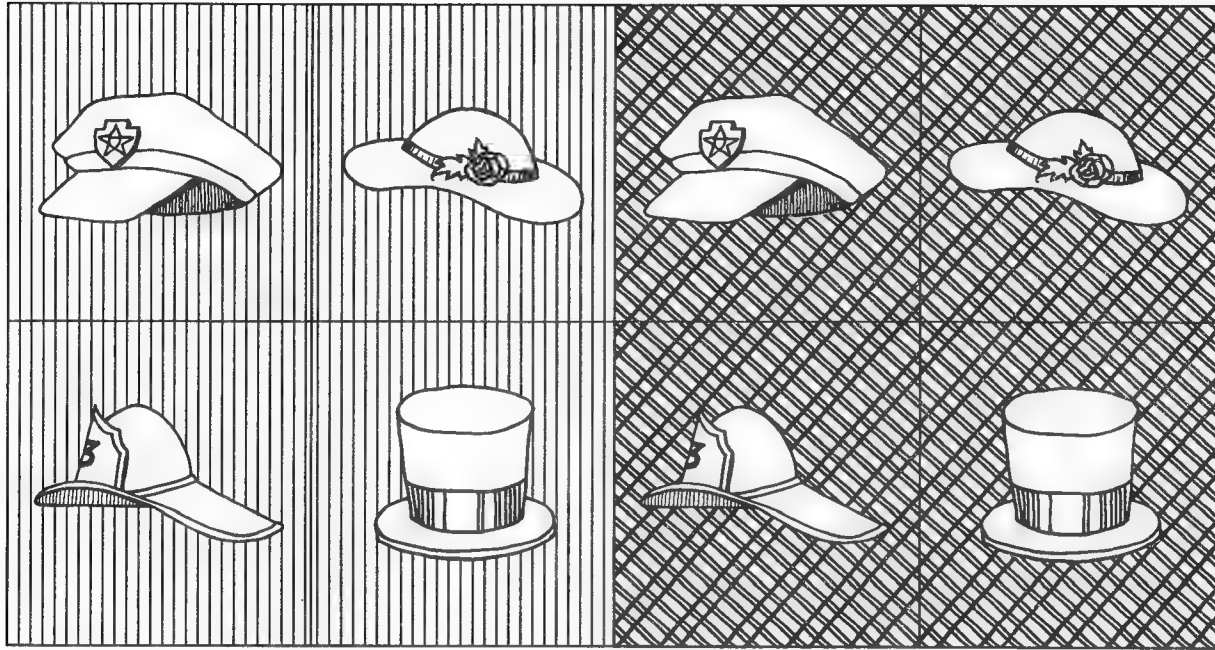


# Game Boards

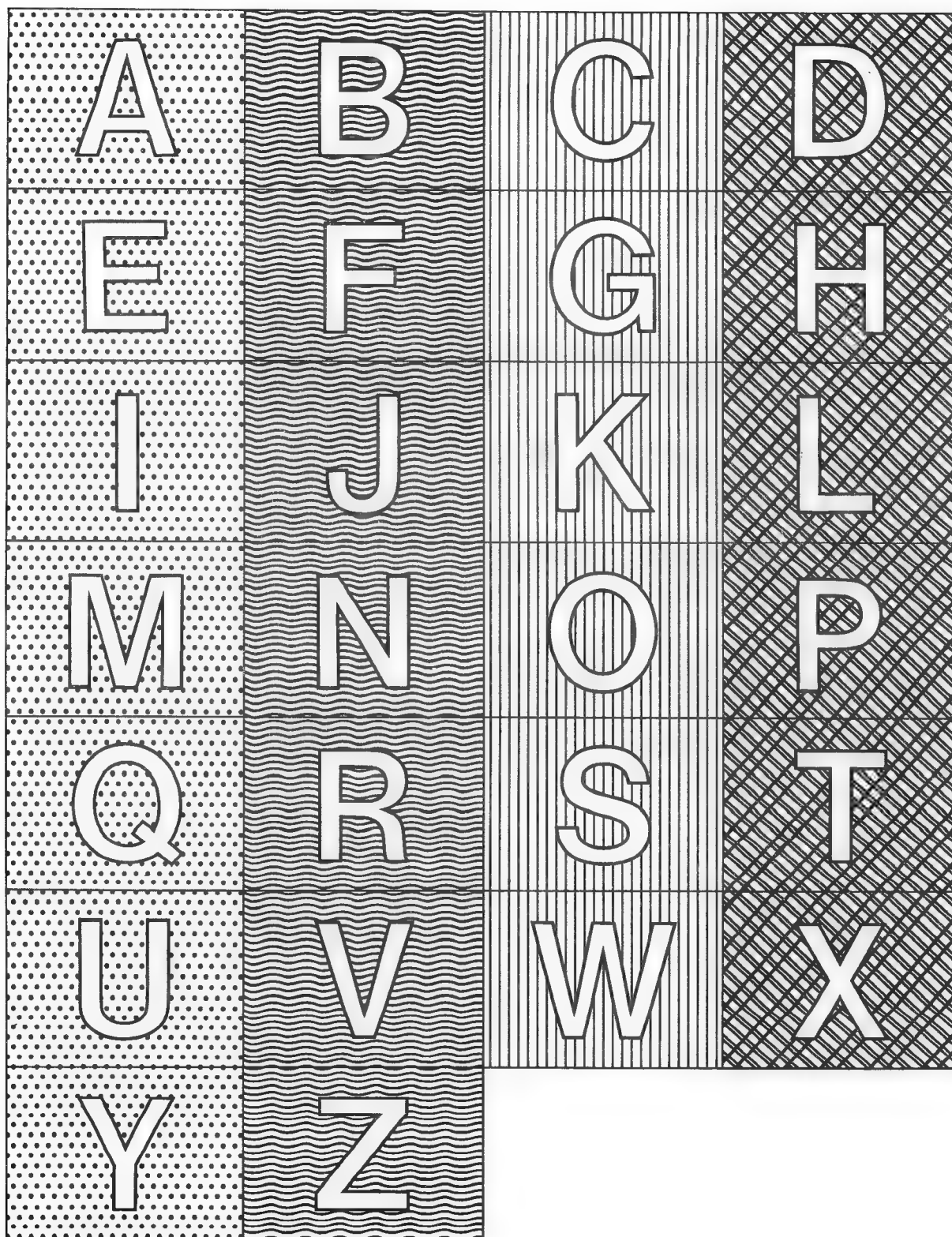
You can find many different solutions to one puzzle.  
Record the solutions on the trains below by  
drawing and coloring in the shapes.



# Hat Cards



# Alphabet Cards



# Attributes

Use information from your class to answer these questions.

1. How many students biked to school? \_\_\_\_\_
2. How many students had milk for breakfast? \_\_\_\_\_
3. How many students biked to school and had milk for breakfast? \_\_\_\_\_
4. How many students biked to school and did not have milk for breakfast? \_\_\_\_\_
5. How many students did not bike to school and had milk for breakfast? \_\_\_\_\_
6. How many students did not bike to school and did not have milk for breakfast? \_\_\_\_\_
7. Could you have answered these questions using only the information in the lists? \_\_\_\_\_
8. Are the questions easier to answer using the loops or using the lists? \_\_\_\_\_



# Name-A-Pair

You can make a snapshot of the same playing piece. Listen to your classmate name a letter-number pair. Color in that location.

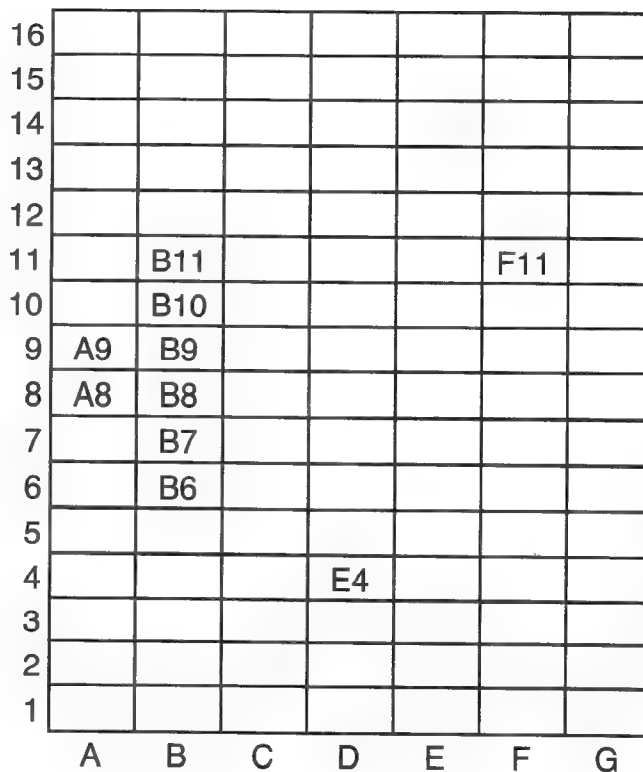
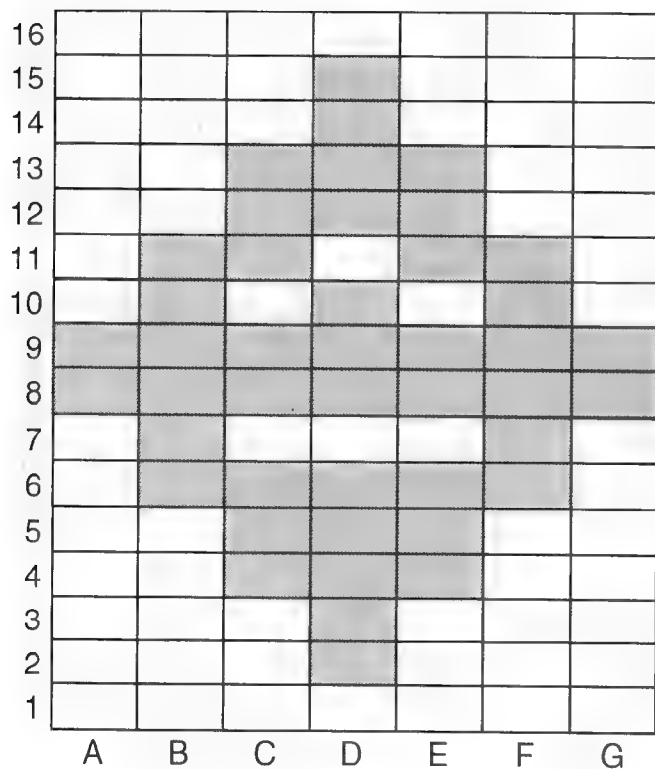
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	A	B	C	D	E	F	G

# Write a Code

You can write the code for a picture.  
Look at the shaded area. Write the  
letter-number codes of each location.



# Grid A

Use the codes below to draw a picture on the grid. Shade each location that is named by the letter-number codes.

**Grid A Codes**

B5	D5	F3
B4	D4	F2
B3	D3	F1
B2	D2	G8
B1	E5	G7
C6	E4	G6
C5	E3	G5
C4	E2	G4
C3	F8	G3
C2	F7	
D6	F4	

**Grid A**

9							
8							
7							
6							
5							
4							
3							
2							
1							
	A	B	C	D	E	F	G

# Grid B

Use the codes below to draw a picture on the grid. Shade each location that is named by the letter-number codes.

**Grid B Codes**

A6	B8	D8
C8	E3	C9
D14	D6	B6
E16	E5	D11
B15	F1	E8
B3	F7	C5
C14	D5	E7
D9	E4	F3
F15	G5	B5
A5	E1	C7
E14	D3	E9
F8	E2	B4
C2	F6	D12
B14	G4	F5
D15	E6	C1
D10	C16	F4
G6	B7	B1
A4	D16	C3
C6	C4	
F14	D13	

**Grid B**

16							
15							
14							
13							
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1							
	A	B	C	D	E	F	G

# Code Exchange

Use this grid to draw your own coded picture.  
Fill in your letter-number codes below.


11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1							
	A	B	C	D	E	F	G

Letter-Number Codes

Use this grid to draw your friend's coded picture. Ask your friend to fill in his or her letter-number pairs below.


11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1							
	A	B	C	D	E	F	G

Letter-Number Codes



## **Appendix**

Special Keys	A1
Glossary	A2
Keeping Current	A3

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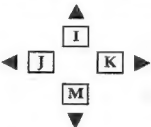
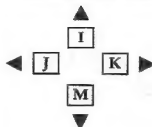


1. Name  
2. Address  
3. City, State, Zip



## Special Keys

### Function

### Key

	Apple II +	Commodore 64	IBM	Tandy 1000
Moves the cursor up, down, right, and left.			arrow keys	arrow keys
Press this key to move the cursor a short distance (for fine control).	CTRL or CONTROL (Apple IIe or IIc)			SHIFT
Press both keys at the same time to turn the sound ON or OFF.	CTRL + G or CONTROL + G	CONTROL + S	CTRL G	CONTROL G
Makes the cursor move continuously. (REPT means "Repeat")	REPT + I REPT + J REPT + K REPT + M or Hold down I, J, K, M (Apple IIe or IIc)	Hold down I, J, K, M	Hold down arrow keys	Hold down arrow keys
Picks up or drops objects.	SPACEBAR	SPACEBAR	SPACEBAR	SPACEBAR
See the special keys list on the screen.	SHIFT + ?	?	 ?	?
Leave the program.	ESC	f1	ESC	ESC
Makes all capital letters when down. NOTE: CAPS LOCK MUST BE IN DOWN POSITION TO PLAY ON THE APPLE IIe COMPUTER.	CAPSLOCK			

### With a joystick

- Press either button to "wake up" the joystick.
- Use the joystick handle to move around.
- Press either button to pick up or drop objects.

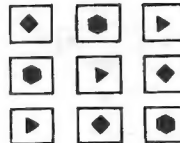
For best results, use a joystick with a handle that returns to the center when it is released.

## Glossary

**Array** An orderly arrangement of objects. In Gertrude's Secrets, the arrays are arrangements of boxes in rows and columns.



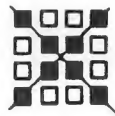
**Attribute** A feature or characteristic of an object. For example, color and shape are attributes of the puzzle pieces in Gertrude's Secrets.



**Column** An arrangement of boxes in a vertical line.



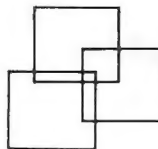
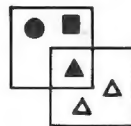
**Loop Puzzle** The Loop Puzzles in Gertrude's Secrets are traditionally known as "Venn diagrams."



**Row** An arrangement of boxes in a horizontal line.



**Venn Diagrams** Venn diagrams are useful in picturing sets and the relationship between sets. For example, if the set is triangles, triangles would appear inside the box, non-triangles outside the box. If there are two rules, for example, blue shapes and triangles, the blue shapes fit in one box. The triangles fit in the other. Blue triangles (fitting both rules) go in the middle where the two boxes overlap.



## **Keeping Current**

The following publications and organizations are intended to provide additional information to educators who want to learn more about computers and their use as an educational tool. Each book, magazine and national organization is recommended by several educators and specialists in computer instruction. And, each resource is available nationally. Subjects included range in content from technical issues addressed in the industry to applications of the computer in the classroom and to prominent organizations that will further stimulate and inform computer users. We hope that **Keeping Current** will help keep you up to date.

### **Books**

Coburn, et al. *Practical Guide to Computers in Education*. Massachusetts: Addison-Wesley, 1982.

Goodson, Bobby, and Ann Lathrop. *Courseware in the Classroom*. Massachusetts: Addison-Wesley, 1983.

Hunter, Beverly. *My Students Use Computers: Computer Literacy in K-8 Curriculum*. Virginia: Reston, 1983.

Kleiman, Glenn. *Brave New Schools: How Computers Can Change Education*. Virginia: Reston/Prentice Hall, 1984.

Papert, Seymour. *Mindstorms*. New York: Basic Books, 1980.

Peterson, Dale, ed. *Intelligent Schoolhouse: Readings on Computers in Learning*. Virginia: Reston/Prentice Hall, 1983.

### **Magazines**

*Classroom Computer Learning*. Peter Li, Inc., 2451 East River Road, Dayton, Ohio 45439

*Compute!* Box 10955, Des Moines, Iowa 50950

*Digest of Software Reviews*. Educational Computing Magazine, 301 W. Mesa, Fresno, California 93704

*Electronic Learning Magazine*. Scholastic Inc., P.O. Box 644, Lyndhurst, New Jersey 07071-9985

*Teaching and Computers*. Electronic Learning, 902 Sylvan Avenue, Englewood Cliffs, New Jersey 07632

*The Computing Teacher*. University of Oregon, 1787 Agate Street, Eugene, Oregon 97403-1923

### **Organizations**

International Council for Computers in Education (ICCE). Department of Computer and Information Science, University of Oregon, Eugene, Oregon 97403  
Computer-Using Educators (CUE). P.O. Box 18547, San Jose, California 95158